

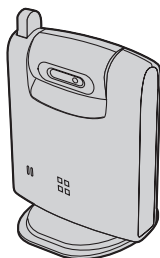
Panasonic

Operating Instructions

5.8 GHz Expandable Digital Cordless Camera

Model No. **KX-TGA593AL**

Indoor Use Only



This cordless camera is an accessory unit for use with Panasonic base units KX-TG5961AL/KX-TG5971AL/KX-TG5976AL. You must register this cordless camera with your base unit before it can be used. Camera monitoring requires a colour display handset (KX-TGA591AL).

Please read these Operating Instructions before using the unit and save for future reference.

Table of Contents

Introduction

Introduction	3
Accessory information	4
Important safety instructions	5
For best performance	6

Preparation

Controls	8
Setting up the cordless camera	9
Symbols used in these operating instructions	12
Registering the cordless camera	13

Camera Monitoring

Camera monitoring using a handset . . .	14
---	----

Useful Information

Wall mounting	18
Troubleshooting	21
Specifications	23

Index

Index	24
-----------------	----

Introduction

Thank you for purchasing the Panasonic 5.8 GHz expandable digital cordless camera.

We recommend keeping a record of the following information for future reference.

Serial No.

Date of purchase

(found on the bottom of the unit)

Name and address of dealer

Attach your purchase receipt here.

Feature highlight

Camera monitoring using the colour display handset

Important:

- This unit is compatible only with the 5.8 GHz Expandable digital cordless handset KX-TGA591AL (colour display type). For further information or to order the handset, visit <http://www.panasonic.com>.
- In these operating instructions, the term “handset” is used to refer to the colour display handset (KX-TGA591AL).

You can monitor the room where the cordless camera is located when:

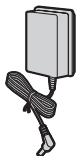
- you access the cordless camera using the handset (page 14).
- the cordless camera pages the handset when it detects sound (page 15).
- the cordless camera user pages the handset using the call button (page 16).

Accessory information

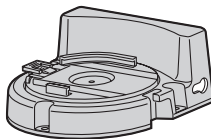
Included accessories

No.	Accessory item	Quantity
①	AC adaptor for cordless camera	1
②	Wall-mounting adaptor for cordless camera	1
③	Call button for cordless camera	1

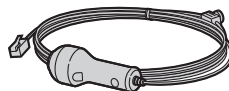
①



②



③



Important safety instructions

When using the product, basic safety precautions should always be followed to reduce the risk of fire, electric shock, or personal injury.

1. Read and understand all instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. After cleaning away the dust on the lens, wipe the lens with a cotton bud.
6. Do not install near any heat sources such as radiators, heat registers, stoves, or other devices (including amplifiers) that produce heat.
7. Protect the AC adaptor cord from being walked on or pinched particularly at plugs, receptacles, and the point where they exit from the unit.
8. Do not touch the unit or the AC adaptor during lightning storms.
9. Unplug the unit when unused for long periods of time.
10. Refer all servicing to qualified service personnel. Servicing is required when the unit has been damaged in any way, such as the AC adaptor cord or plug is damaged, the unit does not operate normally, or has been dropped.

SAVE THESE INSTRUCTIONS

CAUTION:

Installation

- Do not touch the plug with wet hands.
- The AC adaptor is used as the main disconnect device. Ensure that the AC outlet is installed near the product and is easily accessible.

WARNING:

- To prevent the risk of fire or electrical shock, do not expose the product to rain or any type of moisture.
- Unplug the product from power outlets if it emits smoke, an abnormal smell, or makes an unusual noise. These conditions can cause fire or electric shock. Confirm that smoke has stopped emitting and contact an authorised service centre.
- This cordless telephone system does not incorporate provision for secrecy of conversations. Appropriately tuned radio equipment and other cordless telephone systems in close proximity may be used by a third party to monitor and possibly interrupt conversations in progress when this system is on radio operation.

Medical

- Consult the manufacturer of any personal medical devices, such as pacemakers or hearing aids, to determine if they are adequately shielded from external RF (radio frequency) energy. (The product operates in the frequency range of 5.76 GHz to 5.84 GHz, and the power output is 200 mW (max.).) Do not use the product in health care facilities if any

Introduction

regulations posted in the area instruct you not to do so. Hospitals or health care facilities may be using equipment that could be sensitive to external RF energy.

Notice

- Please ensure that a separate telephone, not dependent on local power, is available for emergency use.
- When a failure occurs which results in the internal parts becoming accessible, disconnect the power supply cord immediately and return the product to an authorised service centre.
- To minimise the possibility of lightning damage, when you know that a thunderstorm is coming, we recommend that you unplug the AC adaptor from the AC power outlet.
- This equipment has been tested and found to comply with AS/NZS 3548: 1995 limits for electromagnetic interference. Any modifications to any part of the system or to any peripherals may void the EMC compliance of the system or the peripherals.

For best performance

Avoiding noise

This unit communicates using radio waves.

For maximum distance and noise-free operation, we recommend placing the product away from electrical appliances.

Environment

- Keep the product away from electrical noise generating devices, such as fluorescent lamps and motors.
- The product should be kept free from excessive smoke, dust, high temperature, and vibration.
- The product should not be exposed to direct sunlight.
- Do not place heavy objects on top of the product.
- The product should be kept away from heat sources such as heaters, kitchen stoves, etc. It should not be placed in rooms where the temperature is less than 5 °C or greater than 40 °C. Damp basements should also be avoided.
- Operating the product near 5.8 GHz electrical appliances may cause interference. Move away from the electrical appliances.

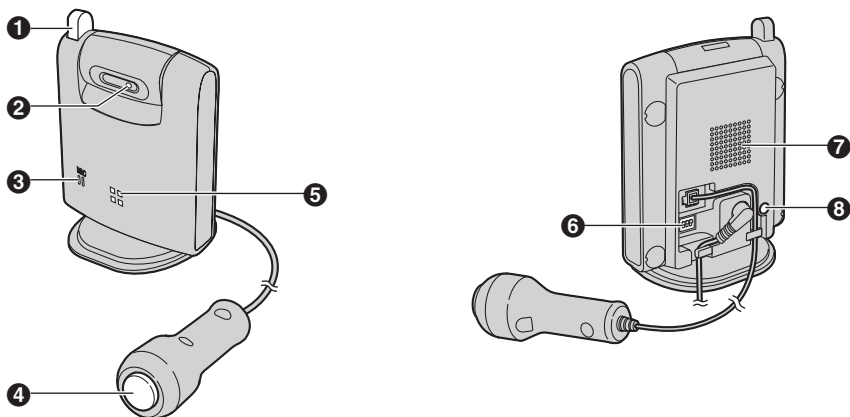
Routine care

- Wipe the outer surface of the product with a soft moist cloth. Do not use benzine, thinner, or any abrasive powder.

Conditions for using the cordless camera

- The cordless camera is intended for indoor use only. Prolonged exposure to direct sunlight or halogen light may damage the camera lens.
- Use the cordless camera in a bright place such as under daylight or a well-lit room.
- Do not use the cordless camera in the following places:
 - near incandescent lamps.
 - near any electrical appliance that emits a strong radio signal.
 - where the subject of the picture is against a light source or in front of a mirror.
 - in places where temperature varies greatly, such as near an air conditioner or heater.
 - any place exposed to oil or steam such as a kitchen.
 - where an object such as glass can cause temperature change due to reflection.
- When using the cordless camera, please take into consideration the rights of others with regard to privacy.

Controls



- | | |
|---------------------------|----------------------------|
| 1 Antenna | 5 Indicator |
| 2 Camera lens | 6 DIP switches |
| 3 MIC (Microphone) | 7 Speaker |
| 4 [Call button] | 8 PROG. (Programme) |

Understanding the cordless camera indicator

The cordless camera indicator shows the status as follows.

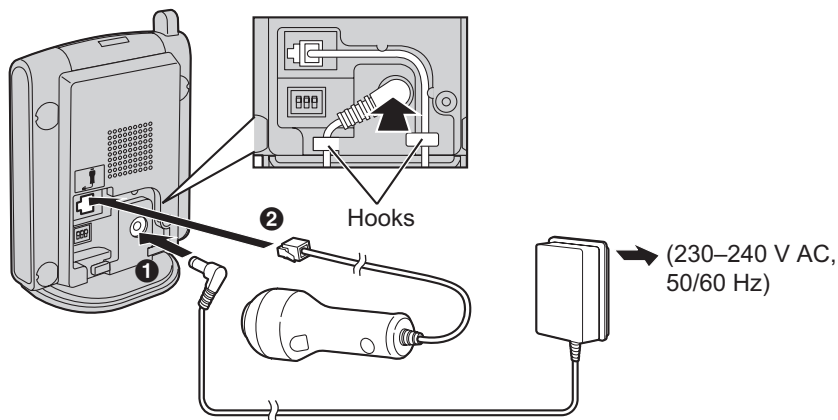
Status	Description
Red (flashing rapidly)	<ul style="list-style-type: none">• The cordless camera is not registered. Register the cordless camera (page 13).• The cordless camera is out of range. Locate the cordless camera near the base unit.
Yellow-green	<ul style="list-style-type: none">• The cordless camera is registered and in standby mode.
Yellow-green (flashing)	<ul style="list-style-type: none">• The camera sensor is responding and the cordless camera is paging the handset.• The cordless camera is connected and sending live images to the handset.

Setting up the cordless camera

Connecting the AC adaptor and the call button

Connect the AC adaptor cord by pressing the plug firmly (❶). Connect the call button cord until it clicks into the unit (❷).

- Use only the included Panasonic AC adaptor PQLV235AL.



Note:

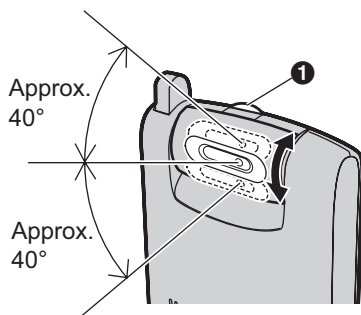
- When the AC adaptor is connected, the indicator lights in red then starts flashing.
- The AC adaptor must remain connected at all times. (It is normal for the adaptor to feel warm during use.)
- The AC adaptor should be connected to a vertically oriented or floor-mounted AC outlet. Do not connect the AC adaptor to a ceiling-mounted AC outlet, as the weight of the adaptor may cause it to become disconnected.

Preparation

Adjusting the cordless camera lens angle

Aim the camera lens by pushing the tab (❶) and rotating the lens forward or backward.

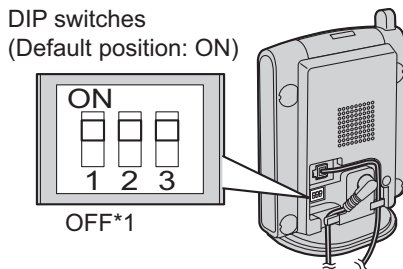
- Using the handset, confirm that the area you want to monitor from the cordless camera is displayed (page 14).



Note:

- Do not touch the camera lens (page 8).

Setting the DIP switches



You can set the following functions by using the DIP switch 1 to 3. Slide each switch with a pointed object such as a pen as necessary. After repositioning the DIP switches to your preferred settings, unplug the AC adaptor then reconnect it. The cordless camera is reset to these settings.

DIP switch	Function	ON (default)	OFF* ¹
1	Image orientation	Standard	Upside down
2	Image quality	Standard quality mode	Enhanced motion mode
3	Speaker volume	Standard	Low

*1 Slide the switch to down.

Displaying the image upside down (DIP switch 1)

To turn the camera image upside down, set to OFF. This feature is useful when you mount the cordless camera upside down (page 19).

Selecting image quality (standard quality mode/enhanced motion mode) (DIP switch 2)

If you want enhanced motion, set to OFF (Enhanced motion mode). The image clarity decreases.

If you want to improve the image clarity, leave at ON (Standard quality mode). The motion becomes less enhanced.

Selecting the cordless camera speaker volume (DIP switch 3)

If you want to lower the speaker volume, set to OFF (LOW).

Symbols used in these operating instructions

Symbol	Meaning
[] : button name/soft key name Example: Unit keys: [INTERCOM] , [OFF] Soft keys: [CALL]	The words in the brackets indicate button names/soft key names on the handset and base unit.
Example: 1 [INTERCOM] 2 Select the desired cordless camera. → [CALL] 3 [MUTE] 4 [OFF]	 1 Press [INTERCOM] . 2 Push the joystick up or down to select the desired cordless camera, then press [CALL] . 3 Press [MUTE] . 4 Press [OFF] .
[▲] [▼]	Push the joystick up or down.

Registering the cordless camera

Register the cordless camera to a KX-TG5961AL/KX-TG5971AL/KX-TG5976AL base unit.

1 Base unit:

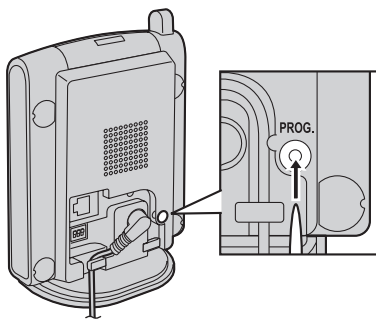
Press and hold **[INTERCOM]** until the IN USE indicator flashes.

- After the IN USE indicator starts flashing, the rest of the procedure must be completed within 90 seconds.

2 Cordless camera:

Press PROG. (programme) on the back side of the cordless camera with a pointed object such as a pen until a beep sounds.

- When registration is completed successfully, the cordless camera beeps and the indicator stops flashing red but remains lit in yellow-green (page 8).



Deregistering the cordless camera

The base unit can cancel the registration of a registered cordless camera.

Important:

- Before deregistering, confirm the cordless camera's extension number from the handset (colour display models only: KX-TGA591AL). Press **[INTERCOM]** on the handset to display its extension.

Base unit

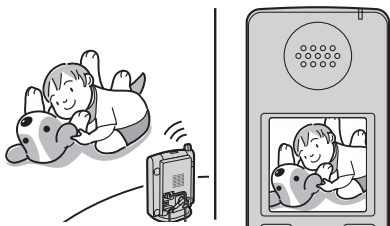
1 Press and hold **[INTERCOM]** until the IN USE indicator flashes.

2 Press and hold the cordless camera's extension number (**[1]** – **[8]**) until a beep sounds.

Note:

- The indicator colour on the camera remains the same.


Camera monitoring using a handset



With a colour display handset (KX-TGA591AL), you can monitor the image and sound of the room where the cordless camera is located. The monitored camera does not ring, allowing you to easily monitor a baby's room, for example, from different areas of the house.

Important:

- Before you start monitoring, confirm that the camera lens of the cordless camera has been adjusted to the correct angle.
- Only 1 person can access the cordless camera at a time.
- A refreshed image taken by the cordless camera is displayed every few seconds. The displayed image is not a moving picture. Selecting enhanced motion mode shortens the interval (page 11).
- While monitoring a cordless camera, other users cannot make an intercom call or transfer a call.
- The monitoring connection is automatically cancelled after 10 minutes.

- While monitoring you cannot place the handset on the base unit or charger. The monitoring connection will be cancelled.
- The cordless camera may not page handsets in the following conditions:
 - when other users are on an intercom or conference call.
 - when electrical interference is emitted from electrical devices.
 - while you are on a call with the handset. (In this case you will hear 2 tones and  will flash on the handset.)

Monitoring the cordless camera from a handset

Handset

1 [INTERCOM]

- 2 Select the desired cordless camera.
→ [CALL]

- 3 Speak to the cordless camera user if necessary.
OR
To mute your sound output, press [MUTE] if necessary.

- 4 When you finish monitoring, press [OFF] or place the handset on the base unit or charger.

Adjusting receiver/speaker volume


Push [▲] or [▼] while monitoring.

Talking to the paged party using the cordless camera

When the cordless camera is paged from a handset, the cordless camera does not ring and the speakerphone is turned on.

You can talk to the handset user. Speak clearly into the MIC.


Handset display item for camera monitoring

Displayed item	Meaning
Example: 	The handset is connected to the cordless camera. When flashing: The cordless camera is paging the handset. (It detects sound or its [Call button] is pressed.)

Paging the handsets from the cordless camera

The cordless camera can page colour display handsets (KX-TGA591AL) when it detects sound or by pressing its **[Call button]**. Then the answering handset user can monitor live images from the cordless camera.

Important:

- Only registered colour display handsets (KX-TGA591AL) can be paged from the cordless camera. The base unit and monochrome display handsets (KX-TGA590AL) cannot be paged.
- If a handset is paged by the cordless camera during a call, 2 tones sound and  flashes on the handset. To monitor the cordless camera from the handset, press **[OFF]**, then press **[Call button]**.
- Auto intercom feature cannot be used when paged by a cordless camera.

Paging using the cordless camera audio sensor

Important:

- You can adjust the audio detection sensitivity (page 17).

1 Cordless camera:

The cordless camera detects sound.

- The cordless camera produces a camera tone and pages the handsets for 1 minute.

2 Handset:

Press **[Call button]** to answer the page.

- You can monitor the room where the cordless camera is located.

3 Handset:

To mute your sound output, press **[MUTE]** if necessary.

4 Handset:

When you finish monitoring, press **[OFF]** or place the handset on the base unit or charger.

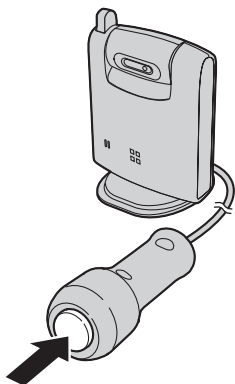
Camera Monitoring

Paging using the cordless camera call button

1 Cordless camera:

Press **[Call button]**.

- The cordless camera produces a camera tone and pages the handsets for 1 minute.



2 Handset:

Press **[📞]** to answer the page.

- You can monitor the room where the cordless camera is located.

3 Cordless camera:

When the handset user answers, speak clearly into the MIC.

4 Handset:

When you finish monitoring, press **[OFF]** or place the handset on the base unit or charger.

Useful settings while camera monitoring

With a colour display handset (KX-TGA591AL), you can set the camera settings while monitoring.

Important:

- Each time you press **[OPTION]**, the right soft key switches between **[BRIGHT]**, **[ZOOM]**, and **[SENSOR]**.

Adjusting the display brightness

There are 6 levels.

1 Start monitoring (page 14).

2 Press **[OPTION]** repeatedly until **[BRIGHT]** is displayed.

3 Press **[BRIGHT]** repeatedly to adjust the brightness.

Note:

- When you finish monitoring, the setting is reset to the default.

Selecting image zoom

1 Start monitoring (page 14).

2 Press **[OPTION]** repeatedly until **[ZOOM]** is displayed.

3 Press **[ZOOM]** to zoom in on the image.

- To return to the original view, press **[ZOOM]** again.

Setting the audio detection sensitivity

The cordless camera features a sensor that detects human voices such as a baby cry. Sounds other than human voices may be difficult to detect. To use this feature, confirm that the cordless camera is located in a place where it can easily detect voices. Once the sensor has detected sound, the cordless camera pages the handset.

To use the audio detection feature of the cordless camera, turn the audio detection sensitivity to on.

There are 3 levels. The default setting is "off".

- 1** Start monitoring (page 14).
- 2** Press **[OPTION]** repeatedly until **[SENSOR]** is displayed.
- 3 [SENSOR]**
- 4** To turn the feature on, push **[▲]**.
Push **[▲]** or **[▼]** to select the desired sensitivity.
 - To turn this feature off, push **[▼]** repeatedly.

5 [SAVE]

Note:

- When you turn this feature off, the cordless camera cannot detect sound (page 15).
- To set the appropriate level, test the sensor of the camera from the handset beforehand.

Wall mounting

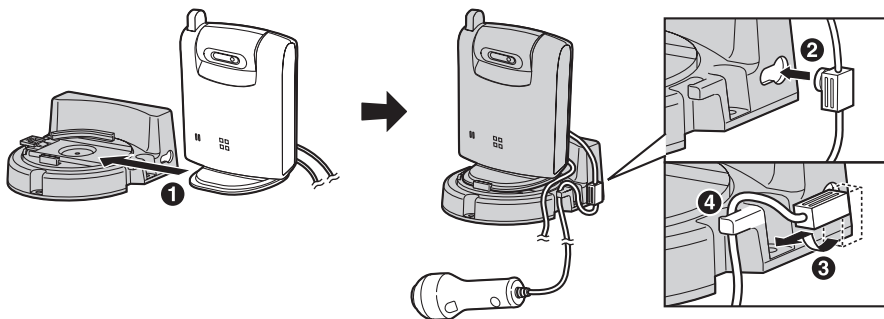
The cordless camera can be mounted by the standard mounting or upside down mounting.

CAUTION:

- Mount the cordless camera on the stable location where the unit can be adequately supported when installing.
- The AC adaptor should be connected to a vertically oriented or floor-mounted AC outlet. Do not connect the AC adaptor to a ceiling-mounted AC outlet, as the weight of the adaptor may cause it to become disconnected.
- **Do not mount the cordless camera on a soft material. It may fall down, break or cause injury.**
- Do not mount the cordless camera on the following places: plaster board, ALC (autoclaved lightweight cellular concrete), concrete block, plywood less than 25 mm thick, and etc.
- Do not pull the call button wire after you mount the cordless camera on the wall.
- After mounting the cordless camera on the wall, speak loudly and clearly into the MIC when talking with the handset user.

Connecting the wall-mounting adaptor

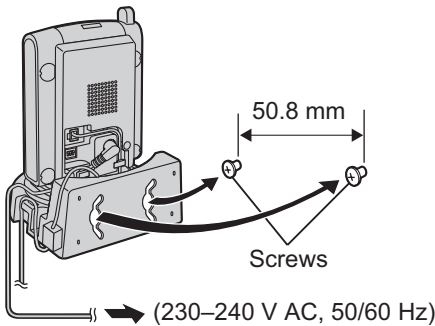
- ❶ Slide the cordless camera into the wall-mounting adaptor in the direction of the arrow until it clicks into the place.
- ❷ Tuck the call button wire into the hole on the side of the wall-mounting adaptor by plugging the small wire fixture into the hole.
- ❸ Turning it slightly and sliding it in place.
- ❹ Fasten the call button wire to the hook of the wall-mounting adaptor.



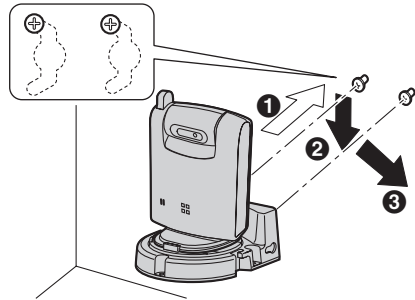
Mounting the cordless camera on the wall

Standard mounting

- 1 Drive the screws (not included) into the wall at a recommended height of 1.8 m or below using the wall mount template as a guide (page 20).



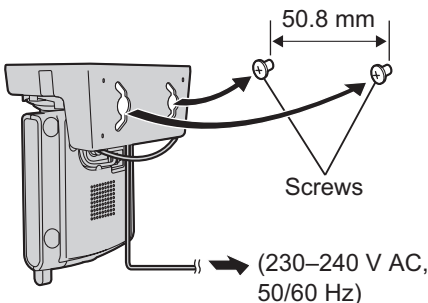
- 2 Mount the cordless camera (1), then slide it down (2) and to the right (3) until it is secure.
 - To aim the camera lens, see page 10.



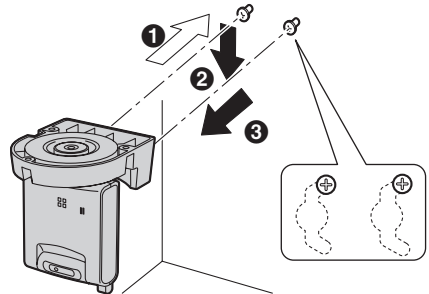
Upside down mounting

- The image may be seen upside down when mounting upside down. To compensate for this, change the cordless camera setting to display images upside down (page 11).

- 1 Drive the screws (not included) into the wall at a recommended height of 1.8 m or below using the wall mount template as a guide (page 20).

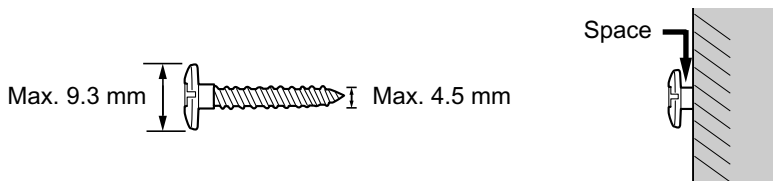


- 2 Mount the cordless camera (1), then slide it down (2) and to the left (3) until it is secure.



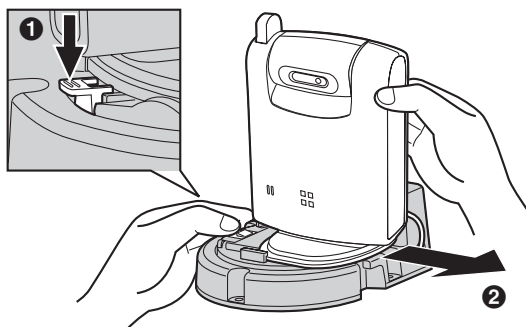
About the screws for wall mounting

- Use the recommended screw size below.
- Drive the mounting screws leaving enough length from the wall to hook the cordless camera.

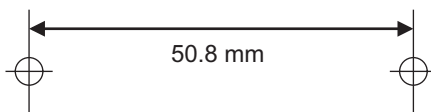


Removing the wall-mounting adaptor

Press and hold the hold button (❶) on the left side of the wall-mounting plate. Slide the cordless camera to the right (❷).



Wall mount template for the cordless camera



Troubleshooting

Problem	Cause & solution
The cordless camera does not work.	<ul style="list-style-type: none"> ● Check the connections (page 9). ● The cordless camera is not registered to the base unit. Register the cordless camera to the base unit (page 13).
The cordless camera's indicator is flashing red.	<ul style="list-style-type: none"> ● The cordless camera is not registered to the base unit. Register the cordless camera to the base unit (page 13). ● The cordless camera is out of range. Locate the cordless camera near the base unit.
The image is faint.	<ul style="list-style-type: none"> ● The camera lens is dirty. Clean it with a soft dry cloth. ● Do not touch the lens directly. Fingerprint may cause an unclear image.
The image sent from the cordless camera is poor on the handset display.	<ul style="list-style-type: none"> ● Adjust the display brightness setting (page 16). ● Select standard quality mode instead of enhanced motion mode (page 11). ● The place where the cordless camera is located is dark. Improve lighting.
The image sent from the cordless camera is dark and difficult to see on the handset display.	<ul style="list-style-type: none"> ● Adjust the display brightness setting (page 16). ● There is a strong sunlight or a backlight in the place where the cordless camera is located. Try shading the camera's location.
I cannot connect to the cordless camera, the image distorts, or the image is slow.	<ul style="list-style-type: none"> ● The cordless camera has lost communications with the base unit. Move the cordless camera closer to the base unit, and try again. ● There is an obstacle such as concrete wall. Move the cordless camera to the place without an obstacle. ● A microwave appliance is in use. Move the cordless camera closer to the base unit or use the cordless camera away from that appliance, and try again.
The camera sensor does not respond.	<ul style="list-style-type: none"> ● If you set the audio detection sensitivity to off, the camera sensor does not respond. Turn this feature on (page 17). ● While a handset is monitoring the cordless camera, the cordless camera stops detecting sound.

Useful Information

Problem	Cause & solution
I pressed [Call button] but the cordless camera does not page the handsets.	<ul style="list-style-type: none">• While the image of the cordless camera is being monitored by a handset, [Call button] will not have response.
The handset speaker and/or the cordless camera emit a howling noise while monitoring.	<ul style="list-style-type: none">• Move the handset away from the cordless camera.
When using the handset speakerphone to have an intercom call with the cordless camera, sound cuts in and out and you have difficulty hearing the other party.	<ul style="list-style-type: none">• Lower the speaker volume by pushing [v].

Specifications

Operating environment	5 °C – 40 °C
Frequency	5.76 GHz – 5.84 GHz
Dimensions	Approx. height 124 mm x width 86 mm x depth 68 mm
Mass (Weight)	Approx. 150 g
Power consumption	Standby: Approx. 1.5 W Maximum: Approx. 2.8 W
Power output	200 mW (max.)
Power supply	AC adaptor (230–240 V AC, 50/60 Hz)
Number of pixels	11,776 pixels
Illuminance	10 lux (min.)
Focus	Fixed 0.25 m – Infinity
Photograph angle	Vertical angle: Approx. 35° Horizontal angle: Approx. 45°

Note:

- Design and specifications are subject to change without notice.
- The illustrations in these instructions may vary slightly from the actual product.

Index

- A** Answering the page: 16
Audio detection sensitivity: 17
- C** Call button: 9, 16
Camera angle: 10
Camera indicator: 8
Camera monitoring: 14
Camera tone: 15
Connection
 - AC adaptor: 9
 - Wall-mounting adaptor: 18
- Cordless Camera Settings
 - Audio detection sensitivity: 17
 - Brightness: 16
 - Image orientation (Upside down): 11
 - Image quality: 11
 - Image zoom: 16
 - Speaker volume: 11
- D** Deregistration: 13
DIP switches: 11
- I** Image orientation: 11
Image quality: 11
- P** Paging handsets: 16
- R** Registering the cordless camera: 13
- S** Speaker volume: 11
Specifications: 23
- T** Troubleshooting: 21
- W** Wall mounting: 18
Wall-mounting adaptor: 18

Notes

Notes

Notes

Customer Support Centre Tel. No.: 132600 or website www.panasonic.com.au



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